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STATISTICS, LIES AND COMPUTER TAPE: UNTANGLING AGGREGATE U.S. AND JAPANESE TRADE DATA

Summary

The oft-quoted expression "lies, damn lies and statistics" seems particularly applicable to the various measurements of Japan's external imbalance and its trade account with the United States. While Japanese and American trade and payments statistics, in themselves, are honest attempts to portray a complex situation, policy analysts on both sides of the Pacific have engaged in a thriving cottage industry in their misuse.

Policymakers have a surfeit of choices that measure external imbalances in this country and Japan. Alternatives include broad versus narrow data, American or Japanese figures, yen or dollar measures, bilateral or global imbalances and real versus nominal figures. American critics of Japan have concentrated on dollar-denominated bilateral trade statistics; these show, perhaps coincidentally, what appears to be a very serious and chronic imbalance. By contrast, other measures point to a decline in Japan's external imbalance of more than 70 percent between 1986 and 1990.

Deriving appropriate implications for policy from current account or trade statistics has proven equally problematic. If pressed, most policymakers will admit that external imbalances reflect mainly macroeconomic factors rather than import or export barriers. Key to this conclusion is the fact that trade imbalances equal capital flows, which are largely independent of trade barriers. Hence, American efforts to remove real or imagined Japanese trade restrictions cannot be expected to have a substantive effect on the bilateral trade imbalance. Yet policymakers frequently have acted as if they believe otherwise. Serious efforts

to reduce external imbalances in the United States and Japan necessarily involve reducing the savings-investment gap in each country; the U.S. federal budget deficit easily is the most important potential target in this regard.

What Trade Statistics Mean

Two hundred years ago nations had a straightforward belief in how to get rich through foreign trade. Under the prevailing theory of mercantilism a country attempted to have its exports exceed its imports by the largest possible amount. Surpluses in foreign trade, which resulted from the successful pursuit of this objective, were seen to be a measure of a nation's wealth in exactly the same way that a household budget or a corporate balance sheet reflects the efforts of an individual or a firm to maximize the difference between income (revenue) and expenses. However, economists later countered that a policy of continually shipping the fruits of a country's labor and other resources in exchange for money, IOUs and gold did little to benefit a particular nation, although it would help specific exporters and firms facing import competition.

Virtually no one in a position to advocate policy will admit to being a mercantilist today. However, some 20th century beliefs are consistent with this philosophy. Advocates of export-led growth, for example, have argued that an increase in exports has spillover effects on demand elsewhere in the economy as the trade proceeds are spent. In a situation where domestic demand is inadequate and unemployment high, increased exports may make the nation richer. Similarly, if demand shifts to domestic products from imports, the output of domestically produced goods would increase and, as a result of the multiplier effect, boost national output. Of course, this argument implies there are limits for export-led growth strategies; such policies would work only up to the point at which labor is fully employed and in situations where a country's trading partners do not adopt similar policies.

During the Great Depression some countries did adopt such "beggar-thy-neighbor" policies, whereby they attempted to resolve the problem of insufficient domestic demand by increasing net exports. These actions and the inevitable efforts of their trading partners to insulate themselves from such damage were factors leading to a contraction of world trade in the 1930s. (Ironically, such efforts would have had only a small positive effect on domestic employment even in the absence of retaliation; in many countries, including the United States, exports and imports were not large enough to have much effect on gross national product.)

In the postwar period the world community established new multilateral arrangements in an effort to avoid beggar-thy-neighbor policies. The General Agreement on Tariffs and Trade sought to prevent nations from imposing trade barriers; the International Monetary Fund was established, in part, to maintain fixed exchange rates that would prevent competitive currency rate depreciations.

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The rationale behind GATT and the IMF was to prevent nations from competing to establish large trade surpluses. In other words, the prevailing philosophy was that nations should avoid mercantilism because it hurt other countries. As such, discussions throughout the postwar period generally have left unanswered an important question concerning mercantilism: if a nation can get away with efforts to expand its external surplus, does it benefit in the end? Many experts believe that nations have continued to act as if such mercantilistic policies would enhance their economic welfare since they appear to be pursuing these types of policies within the strictures created by the IMF and GATT. These same experts have pointed to Japan as a leading practitioner of export-led growth and, ultimately, mercantilism.

Japan, in fact, did place a high priority on the export side of its trade account during the 1950s and 1960s, although some of Tokyo's efforts were directed toward avoiding excessively large trade deficits. Whether Japan's actual growth during this period can be characterized as "export-led" is open to debate; some evidence suggests that exports grew only after domestic growth had occurred. In any event, Japan's rapid economic expansion from the 1950s through the mid-1980s, coupled with declining trade deficits and then mounting trade surpluses, suggested to some observers that mercantilist policies were more effective than had been thought previously. (By the mid-1980s, if not sooner, Japan's stated policy objectives had shifted to favor a reduction in what had become its large trade surplus.)

Economists, however, remain skeptical that trade surpluses are an unmistakable sign of successful economic policy. In broad terms a surplus in foreign trade means simply that a nation produces more than it consumes and invests. If a nation works to live rather than lives to work, economic well-being is better judged by what is consumed or otherwise used rather than what is produced. In such cases a trade surplus is desirable only if it leads to higher levels of consumption over the long run.

Although a trade surplus can be beneficial, it need not be. In the 1950s the United States had a large worldwide trade surplus year after year. One consequence was rising U.S. direct investment around the world. Considering its small size, Cuba got more than its share, accounting for about 3 percent of outstanding U.S. investment abroad in 1958. After the Cuban revolution in 1959 Havanna confiscated U.S. assets without compensation, leaving the United States about a billion dollars poorer; approximately that portion of cumulative U.S. trade surpluses was virtually for naught. Likewise, many nations have clearly benefited from trade deficits. For example, late 19th and early 20th century America had large trade deficits, a consequence of heavy demand to build this country's industrial base. Those purchases made American industry and workers more productive, with positive implications for living standards and, not incidentally, this country's trade surpluses by the middle of the 20th century.

What about Japan? Some analysts have described Japan as producer- rather than consumer-oriented. This corresponds to a view of Japan as a latter-day King Midas, more concerned about making and accumulating trade surpluses than spending them. Of course, the king eventually found to his regret that mere accumulation of monetary assets benefited him little. If, however, an individual or a nation derives satisfaction from earning money rather than spending it, then it may be happier with a larger trade surplus, without regard to how it is invested. In this case mercantilism may make economic sense -- provided it does

not provoke a response from trading partners and the country in question does not care about hurting the economies of other nations.

This situation, however, does not appear to apply to Japan. During the postwar period Japan has had high rates of GNP growth and rapid rates of increase in consumer spending compared to a broad range of other countries. This result suggests that policymakers there have not had to choose between the producer and the consumer; helping the producer has led to higher output, which, in turn, has helped the consume In fact, given the current pressure from labor unions for shorter work hours and from a variety of sources for more public amenities, the assumption that Japan would choose production over consumption may well be incorrect.

External Surpluses and Capital Flows

Underlying any discussion of trade and current account imbalances is an inevitable acknowledgment of capital flows. As noted above, a surplus implies that a country produces more than it uses; a deficit, the reverse. This means that a surplus country collects an IOU from the deficit country. The sum of such debts equals the difference between what a nation produces and what it uses domestically.

At this level of abstraction most people will accept the linkage between surpluses and capital flows. When it comes to actual policies, however, the connection may get lost. For example, American policymakers sometimes talk as if they would like to reduce this country's trade deficit while maintaining the inbound capital flows that keep interest rates at relatively low levels. In particular, Washington would like to see U.S. sales in Japan increase. However, the result of higher U.S. exports to Japan is to set one or more processes in motion, depending on how the U.S. exporter uses the proceeds of its sales; these actions either will lead to a smaller net inbound capital flow or offsetting increases in Japanese exports to this country. Three alternatives serve to illustrate the linkage between trade and capital flows.

One possibility is that a company expanding sales to Japan exchanges the yen received in payment back into dollars, which is, after all, how it pays its employees and suppliers. In this case the increased level of U.S. exports results in additional yen on foreign exchange markets, pushing down the value of that currency. As a consequence, Japanese exporters will find selling goods in the United States and elsewhere more attractive; Japan's surplus may end up unchanged. In this scenario higher U.S. exports have been matched by higher Japanese exports.

A second possibility is that the U.S. exporter simply may keep the yen, without exchanging it on currency markets or depositing it in a financial institution. Here, although the importer has met its obligation to the exporter, Japan as a nation still has a liability since the exporter has yen that it can convert or spend; in other words, the American company makes the equivalent of an interest-free loan to the country whose currency it holds. Ordinarily, this claim would be represented in the capital flow portion of the balance of payments statistics, although it could end up as part of "errors and omissions" if it goes unreported.

Thirdly, the hypothetical American exporter may accept a dollar payment drawn on the Japanese importer's Eurodollar account, depositing it in the U.S. firm's own Eurodollar account. The capital flow dimension in this instance is the same as for the exporter that withdraws its payment from the financial system by putting the money in a safe or under a mattress. While the American seller has increased foreign assets, the reduction in the Japanese buyer's Eurodollar account implies reduced Japanese foreign assets, arithmetically the same as increased liabilities. In this example higher Japanese import levels would be matched in the Japanese data by an equal reduction in net capital outflows. The U.S. balance of payments, in turn, would record higher exports matched by higher net capital outflows (or lower net capital inflows) since the transaction would involve an increase in the assets held abroad by Americans.

Many more examples could be cited of actual capital movements, involving Euroyen, long- and short-term funds, equity investments and direct investment in manufacturing facilities abroad. On inspection, however, all these alternatives end up being variations on a theme, with the effect of increased U.S. exports to Japan, for example, implying either an exchange rate change, higher net U.S. assets abroad, lower net Japanese foreign assets or some combination of the three.

What Causes External Imbalances?

The origin of external imbalances owes much more to exchange rate changes and capital inflows and outflows than to changes in export and import demand. This conclusion is not obvious from the approach taken by American and Japanese policymakers.

Changes in Export or Import Demand - Trade negotiators are likely to imply that a reduction in external imbalances can be achieved by adjusting import or export barriers. For example, in a rapidly growing Japanese economy imports could be expected to rise, other factors equal, reducing the trade surplus. Similarly, if the United States were to loosen its restrictions on imports from Japan, the U.S. trade deficit would widen, other factors equal. In fact, this alternative is unlikely because other factors can be expected to change as well. If the demand for U.S. products in Japan were to increase, for example, exchange rates probably would be set in motion as well. The increased demand for dollars to pay for U.S. exports would lift the value of the American currency but also lead to higher exports from Japan; this eventually would bring about a reduction in the level of U.S. exports to Japan.

How far would the exchange rate adjust? Recall that the counterpart of a trade imbalance is a capital flow. The desired capital flow depends on interest rates in the two countries. As long as interest rates do not change, the amount of the capital outflow will not change. When coincidental interest rate changes are not a factor, the exchange rate will adjust only enough so as to keep the capital flow in lockstep with the current account. In other words, a shift in export or import demand is unlikely to lead to a change in the external imbalance.

This argument may be viewed in another way. A jump in Japanese demand for U.S. products implies that American companies get more Japanese funds. What do they do with this money? Only if it is hidden in mattresses or otherwise passively invested in Japan will the increased exports enhance the U.S. trade

balance. This is unlikely to happen; unless Japanese interest rates rise, U.S. exporters will not want to add to their holdings of yen-denominated instruments. On average exporters have no reason to expect higher Japanese interest rates. However, if they try to exchange yen for dollars, the exchange rate moves, with the predicted consequences of higher Japanese exports.

Capital Flow-Related Changes - Alternatively, the change in Japan's external imbalance could be a result of changes in optimal capital flow patterns. For example, if the federal government in the United States increases its borrowing, it puts pressure on capital markets, other factors equal. As a result, interest rates rise in this country, attracting increased capital from abroad. This factor, in turn, creates a demand for the dollar, pulling up its value. As a result of the more expensive dollar, U.S. exports decline and imports rise. In short, increased U.S. demand for capital leads to a corresponding hike in the trade deficit and inbound capital flow.

This conclusion has dramatic implications for trade policy. It suggests that market-opening initiatives involving the Japanese market are likely to have little, if any, effect on the trade imbalance. Conversely, changes in capital market demand are likely to have a powerful influence on the imbalance. For this reason U.S. and Japanese negotiators agree, in their more thoughtful moments, that the key to reducing Japan's trade surpluses and America's trade deficits is not endless trade talks but rather actions affecting the demand for capital in each country.

Ironically, U.S.-Japan talks that go beyond trade matters are more likely to have an impact on the bilateral trade imbalance than those with a narrower focus. For example, in the Structural Impediments Initiative the two sides discussed and made promises concerning fiscal policies in addition to those involving market access and other issues (see JEI Report No. 26B, July 6, 1990). In this case, however, Tokyo and Washington avoided fiscal commitments that necessarily would have changed international capital flows substantially.

The capital flow argument entails another question. What causes the international flow of funds? The answer is complicated but boils down to a simple concept: demand and supply of capital on domestic markets. For example, since the early 1980s Tokyo has played an important role in the determination of Japan's external imbalance; its actions to reduce the deficit in government spending relative to GNP sometimes have been the opposite of those made in Washington.

Other dimensions of the supply and demand for capital in Japan exhibit a less clear-cut pattern. Although Japanese corporate spending on plant and equipment stagnated in the early 1980s, it has increased dramatically since 1986, putting upward pressure on interest rates in Japan and, through those rates, the value of the yen. From April 1986, the start of FY 1986, to the March 1990 end of FY 1989 (FY 1989 being the most recent year for which data are available) increased demand in the corporate sector for funds more than offset decreased public-sector demand. (For details, see JEI Reports No. 15A, April 14, 1989, and No. 11A, March 22, 1991.)

In addition, Japanese household savings rates declined slowly in the 1980s, but they remain high compared to most of Japan's trading partners. In 1989, the most recent year for which data are available, households saved 13.8

percent of their disposable income, down from levels averaging more than 18 percent at the beginning of the decade but still triple U.S. rates by conventional measures. Since household income -- the source of savings -- has grown and demand for capital within the household sector for housing has varied, the amount of yen-denominated household savings available for financing corporate activity has shown an up-and-down pattern.

In short, movements in the supply and demand for capital in Japan have fluctuated and partly offset each other. That leaves non-Japanese factors as the dominant factor in international capital flows. In this respect the U.S. budget deficit reigns like an 800-pound gorilla. Not only is it larger than the other factors but it increased dramatically in the early 1980s and has experienced only a modest decline since then. It should come as no surprise that the U.S. current account deficit measured against GNP tracks very closely the budget deficit measured on the same basis. Even the Japanese current account surplus shows a similar relationship to the U.S. budget deficit. Japan's still-high household savings rate explains why Japan -- rather than America's other trading partners -- has ended up financing such a large share of the U.S. capital shortfall.

Measuring External Imbalances

In short, external surpluses or deficits do not mean what they seem to mean. They have a lot to do with monetary and fiscal policies that create conditions in capital markets and very little to do with commercial policy that could be motivated by mercantilist ideology. Of course, both Washington and Tokyo still monitor the direction of the current account and the trade imbalance closely. Once policymakers decide to worry about external imbalances, they face the choice of which of many possible measures to emphasize. The policy implications drawn from the numbers may well differ depending on which measure is chosen.

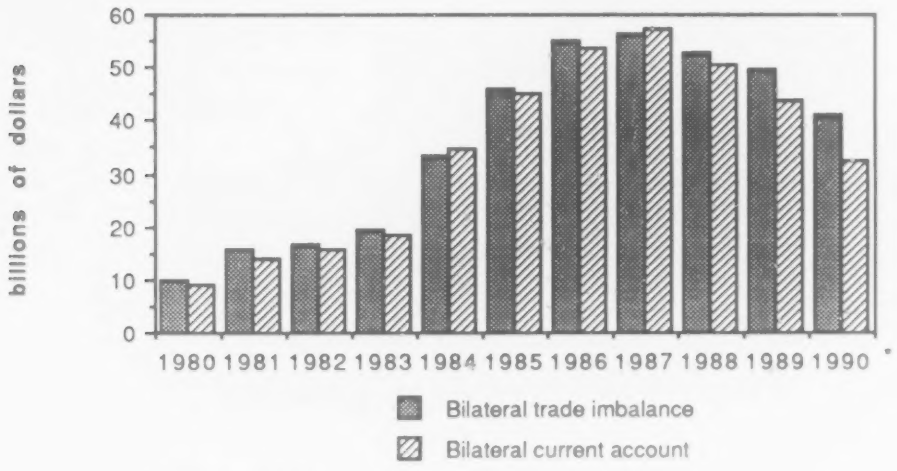
Policymakers have many possible yardsticks from which to choose. Some measure trade in the most narrow sense; others include transactions not uniformly considered to be trade at all. In addition, trade may be measured bilaterally or globally and in nominal dollars, nominal yen or in real terms. Finally, trade can be measured relative to other variables such as GNP.

The most widely cited statistic in the United States of Japan's trade position is the U.S. figure for the trade balance between the two countries measured in dollars. After growing rapidly during the early 1980s, this country's huge trade deficit with Japan has declined slowly in recent years. The alleged "stickiness" of the imbalance, especially when compared to greater declines in other bilateral U.S. imbalances, such as that with Europe, has led some American observers to conclude that its persistence is somehow Tokyo's fault.

This statistic probably gets the publicity that it does primarily because of its relative immediacy: it is reported monthly six weeks after the period it measures. (January data are released in March, for example.) However, it suffers from some noticeable defects, the most obvious being limited coverage. Trade in services, such as tourism, is not measured; nor does income from foreign investments get incorporated. For U.S.-Japan transactions these omissions have tended to make the bilateral imbalance appear larger than it

actually is. Figure 1 contrasts the bilateral trade figures with statistics that resolve these difficulties -- current account data, which show a somewhat smaller gap. However, since current account figures are released only quarterly and come more than two months following the end of the period they describe, the numbers receive less press play in this country.

Figure 1: U.S. Measures of Bilateral Trade



*Preliminary

Source: Department of Commerce

The Ministry of Finance publishes a trade figure conceptually similar to the monthly U.S. trade numbers. Imports are measured on a cost, insurance and freight basis, as opposed to the U.S. data, which exclude insurance and freight. For this reason Japan's imports from the United States seem larger according to the Japanese data than they do in the U.S. figures, with the result that Japan's trade surplus seems smaller than the counterpart U.S. trade deficit. The two data series, however, have other differences that largely offset each other.*

In 1990 the Japanese measure of the bilateral trade imbalance in goods was $38 billion, a drop of 15.4 percent from the 1989 number (see JEI Report No. 5B, February 8, 1991). By comparison, the U.S. figure came to $41.1 billion, a 17.5 percent contraction, suggesting how similar the two statistical series are. (All the 1990 figures are preliminary.) The emphasis on the American data in the United States is understandable but somewhat inappropriate since Tokyo's figures come out a full month earlier. The distinction was striking on at least one occasion when Wall Street reacted with alarm to a U.S. figure for bilateral trade even though market analysts could have looked at a more calming figure put out the same day by the Ministry of Finance; MOF's more timely data described an additional month's events and presented an opposite picture.

*For details, see "Nichi-bei Boeki Tokei: Sai-wa Unchin Hokenryo-nado-ga Shuin," Toyo Keizai Tokkei Geppo (May 1991), p. 33.

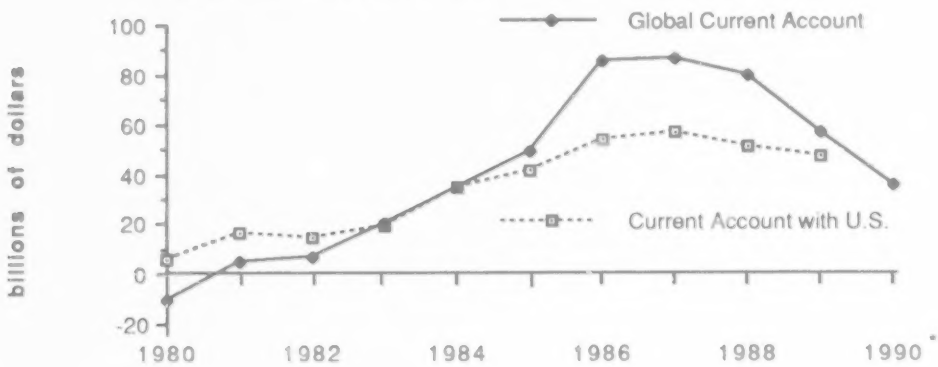
Japan also publishes bilateral current account data. The numbers are even less timely than the corresponding U.S. figures. Prepared by the Bank of Japan, the statistics are available only on a semiannual basis. The most recent number as of early April 1991 is for the first half of 1990; it shows a $19.1 billion imbalance, down from $23 billion in the same period of 1989.

Despite the press play that many of these bilateral figures get, most serious analysts regard even the most comprehensive of them as deficient. While the United States is Japan's largest trading partner and Japan is the largest supplier to and the second-largest market for the United States, neither country dominates the other's trade. Bilateral data focus excessively on this trade to the exclusion of all other transactions. More important, however, is that an emphasis on bilateral data tends to lead to the conclusion that U.S.-Japan trade ought to be balanced.

Such a view is nonsense even if one agrees that external balances are important. Given any nation's comparative advantage, one would expect it to have chronic surpluses with some countries and persistent deficits with others. Japan is a particularly good example. As a country with virtually no raw materials, it is a big importer of industrial and agricultural inputs. If, as is the case, it has huge deficits with countries such as Saudi Arabia, it needs surpluses with others just to maintain global balance. If Japan's trade with the United States were in balance, it probably would have a substantial deficit in its overall trade. In short, Japan's chronic surplus with the United States is partly offset by deficits with a variety of other countries.

The need to look beyond Japan's bilateral trade flows suggests the benefit of looking at Japan's worldwide exports and imports. Figure 2 shows Japan's global current account imbalance as measured in dollars and, for reference, Tokyo's measure of the surplus with the United States. The series also is available denominated in yen. In some respects these statistics represent the fullest picture of Japanese trade since they include all transactions and all countries.

Figure 2: Japan's Current Account



*Preliminary

Source: Bank of Japan

It is this series that corresponds to Japan's net overseas capital flow. The Table shows the relationship between trade data, the current account and international capital transactions. Exports and imports determine the trade balance (row 3), which, unlike the Ministry of Finance customs-clearance trade statistics discussed above, is measured net of insurance and freight charges. Adding services and transfers (both of which may be positive or negative) to the trade figure gives the current account imbalance (row 6). The figures below this show the purposes to which the surplus was put (capital flows), which may be long- or short-term, private or public. (Further details on the composition of the capital flow are available in JEI Report No. 7B, February 22, 1991. The result of continued large capital flows -- an increase in Japan's international creditor position -- is detailed in JEI Report No. 38A, October 5, 1990.) In total they equal the current account imbalance (row 22). The "errors and omissions" line is an indication of the extent to which data collected from different sources are inconsistent with the equality demanded by double-entry bookkeeping.

The data in the table show a consistent pattern in Japan's global imbalances in recent years. The decline in its trade surplus has been modest, but the drop in the more comprehensive current account imbalance substantial. By definition the decline in capital flows has matched this contraction, with private capital flows generally rising or falling in synch with the current account. The one exceptional year in this regard was 1987; in that year surging short-term capital inflows and bank liabilities (rows 18 and 21), coupled with near-constant long-term outflows, reduced net private outflows in the face of a somewhat larger current account surplus. The data show that official flows (row 20) made up the difference, reflected at least in part by massive currency market intervention that year. The table also indicates that among the most volatile components of capital flows are long-term inbound capital, a phenomenon that largely reflects American investors moving in and out of the Japanese securities market.

While the data in Figure 2 and the table are comprehensive, even they do not give the complete picture, particularly from the Japanese perspective. Since they are expressed in dollars the data adequately show capital flows to the United States and elsewhere but do not demonstrate the importance of trade or capital flows to the Japanese economy. If the yen were to depreciate, for example, a given dollar-denominated capital flow would require more yen to finance. Similarly, a given value of exports as measured in dollars would be larger in yen terms. Nor do these data give a feel for net foreign transactions relative to the rest of the Japanese economy.

Japan's current account measured in yen resolves these differences when expressed as a percentage of nominal GNP (see Figure 3). From the Japanese perspective this may be the most meaningful measure of the net impact of international commerce on the Japanese economy. A comparison of Figure 1, which reflects the impact of Japanese trade on the U.S. economy through the prism of the most widely used U.S. measure (the bilateral trade imbalance), with Figure 3 reveals striking distinctions after 1986. Until that year both standards showed growing imbalances. But the U.S. measure, which peaked in 1987, recorded a drop of only 27.9 percent between then and 1990. From the Japanese perspective its current account surplus relative to GNP shrunk 71.4 percent from a 1986 peak. In other words, in recent years American policymakers are likely to believe that progress has been minimal, while Japanese policymakers can be convinced that their economy's external surplus is practically a thing of the past.

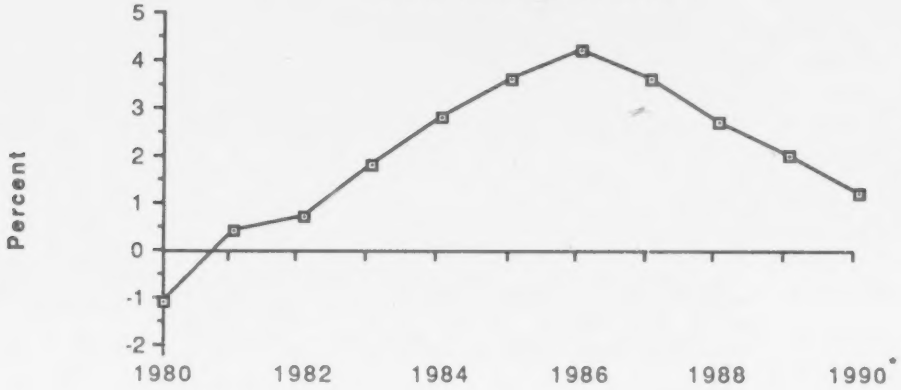
Japan's Balance of Payments, 1986-90

(in millions of dollars, IMF value basis)

		1986	1987	1988	1989	1990(p)
1.	Exports (f.o.b.)	$205,591	$224,605	$259,765	$269,570	$280,177
2.	Imports (f.o.b.)	112,764	128,219	164,753	192,653	216,321
3.	Trade Balance (1)-(2)	92,827	96,386	95,012	76,917	63,856
4.	Services	-4,932	-5,702	-11,263	-15,526	-22,587
5.	Transfers	-2,050	-3,669	-4,118	-4,234	-5,477
6.	Current Account (3)+(4)+(5)	85,845	87,015	79,631	57,157	35,792
	Long-Term Capital Outflow					
7.	Direct Investment	14,480	19,519	34,210	44,130	47,941
8.	Trade Credits	1,836	535	6,939	4,002	-744
9.	Loans	9,281	16,190	15,211	22,495	22,190
10.	Securities	101,977	87,757	86,949	113,178	39,681
11.	Other	4,521	8,829	6,574	8,313	11,572
	(7)+(8)+(9)+(10)+(11)	132,095	132,830	149,883	192,118	120,640
	Long-Term Capital Inflow					
12.	Direct Investment	226	1,165	-485	-1,054	1,750
13.	Trade Credits	-40	-1	-18	-9	-2
14.	Loans	-34	-119	-82	17,813	39,112
15.	Securities	545	-6,081	20,298	85,144	34,653
16.	Other	-63	1,334	-760	978	1,672
	(12)+(13)+(14)+(15)+(16)	634	-3,702	18,953	102,872	77,185
17.	Net Long-Term Capital Outflow	131,461	136,532	130,930	89,246	43,455
18.	Net Short-Term Capital Inflow	-1,609	23,865	19,521	20,811	21,367
19.	Errors and Omissions	2,458	-3,893	2,796	-22,008	-20,938
20.	Net Increase in Gold and Foreign Exchange Reserves	15,729	39,240	16,183	-12,767	-7,842
21.	Net Increase in Liabilities of Authorized Foreign Exchange Banks and Other Transactions	60,496	68,785	45,165	20,519	-608
22.	Net Long- and Short-Term Capital Flows, Errors and Omissions and Official Capital and Gold Flows = Current Account (6) (17)+(20)-(18)-(19)-(21)	85,845	87,015	79,631	57,157	35,792

Source: Calculated from Bank of Japan data

Figure 3: Japan's Current Account as Percentage of GNP



*Preliminary

Note: Yen-denominated current account divided by nominal GNP.

Sources: Bank of Japan and Economic Planning Agency

However, all the data shown in Figures 1-3 still are not enough, even taken together, to address a question frequently raised about Japan's trade. When the yen virtually doubled in value against the dollar between 1985 and 1988, one might have expected Japanese exports to become more expensive and imports cheaper, resulting in a dramatic decline in Japan's current account and other external balances to the point where some series might turn negative, as had been the case in 1980. Yet many analysts have concluded from a perusal of trade statistics and current account data that the imbalances budged relatively little in response to the yen's appreciation: even Figure 3 shows that the current account imbalance in 1990 involved a larger percentage of the Japanese economy than it had between 1980 and 1982.

These analysts argue from these statistics that Japanese exports and imports are unresponsive to changes in the exchange rate. Some critics take the argument a step further, suggesting that, since exchange rate changes do not work to reduce Japan's surplus, Washington should try other means, including inducing Tokyo to take market-opening measures or to engage in managed trade. As noted above, however, such measures will not affect trade imbalances in the absence of changes in international capital flows, and they are unlikely to change without deviations in relative interest rates.

In short, a demonstration that exchange rates do influence export and import volumes will prevent these critics from pursuing a logical path that would be incorrect in any case. Fortunately, their initial premise is also wrong; Japanese exports and imports do respond to exchange rate changes.

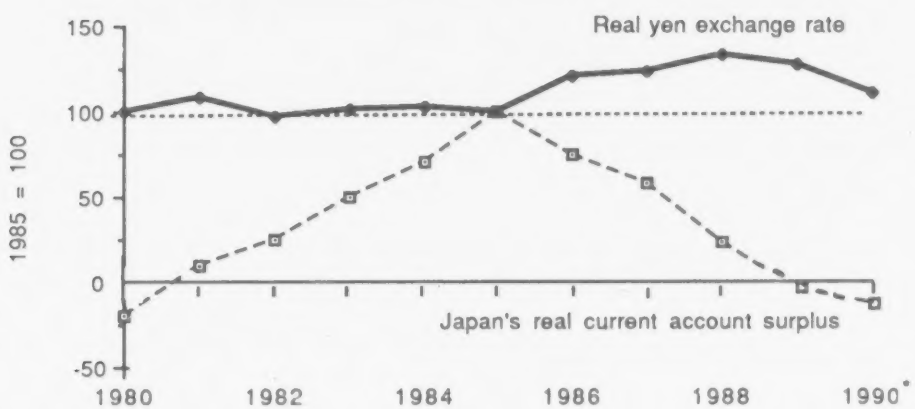
Their error is superficial consideration of the statistical nature of external imbalances. All the data presented up to now have been expressed in value (price times volume) terms. Drawing inferences about volumes of exports and imports from value data alone is inappropriate if prices also change, which clearly is what happens when currency values shift. For example, as the yen

appreciated from 1985 to 1988, Japanese companies attempted to maintain their yen-based prices, other factors equal, implying that prices expressed in dollars rose. Even if competitive pressures prevented dollar prices from rising as much as they might have, such prices were not completely stable either. Hence, even if the dollar value of exports increased, the volume of exports might have declined.

In addition, the yen's appreciation could be expected to work its magic on reducing export volumes only if the currency change resulted in Japanese exporters having to raise their prices more than their American and European rivals. With overall inflation less in Japan than in most of its trading partners, however, exporters there most likely would have enjoyed increased global competitiveness in the absence of the yen's appreciation. For this and other reasons the yen's appreciation is inappropriately expressed if not adjusted to reflect Japan's greater price stability; only to the extent that the yen appreciated more than the difference in inflation rates between Japan and its trading partners could meaningful appreciation be said to have taken place.

Figure 4 sorts out the effects of price changes for exports and imports and in relative rates of inflation. One line shows an International Monetary Fund measure of the yen's real trade-weighted exchange rate. The effect of taking inflation out of the yen's value is to reduce dramatically the Japanese currency's apparent appreciation. Its peak value in 1988 was 33.2 percent above the 1985 level. By 1990 it was practically back to its 1981 value although still 11.4 percent ahead of 1985.

Figure 4: Real Trade Balances and the Real Yen



*Preliminary

Sources: Economic Planning Agency and International Monetary Fund

The second line shows exports and imports adjusted for price changes, with 1985's real current account surplus scaled to represent 100. During the early 1980s the surplus measured this way increased despite the yen's nearly stable real value. In part this reflected the recovery, particularly in the

United States, from the recessionary conditions of 1981 and 1982. The real appreciation of the yen that began in 1985, however, reversed the course of the price-adjusted current account, which took on a negative value in 1989, one year after the real value of the yen peaked. The real deficit continued to grow in 1990 in the face of the yen's depreciation.

The lesson of Figure 4 is that exchange rates matter by affecting export and import quantities. Changes in export and import quantities alone since 1985 would have been able to throw Japan's external accounts into deficit. The fact that this did not happen for measures based on dollars is attributable to the higher dollar-denominated prices exporters were able to charge their overseas customers; yen-denominated measures remained in surplus, too, but as a result of the lower prices Japanese companies paid for imports expressed in yen.

Conclusion

A nation's external account measures are like the many rooms of a mansion, each serving a different purpose. The choice of appropriate statistics depends on the purpose to which it is put. In assessing Japan's trade performance, American critics often have chosen inappropriately, typically selecting too narrow a measure. Furthermore, the same critics often, by design or accident, use measures that cast Japan's trade performance in the least favorable light. Partly for this reason American and Japanese policymakers have developed quite different views about the extent of progress in reducing Japan's external imbalances.

The merit of trade statistics generally is open to serious question. It is not that the measures are poorly constructed; on the contrary, the statistics produced on both sides of the Pacific do their compilers proud, with Washington more than holding its own with Tokyo. However, all that good work may be unnecessary. After all, the government does not bother to measure the important trade between Texas and California, although it can provide excruciating detail on foreign trade with a relatively minor U.S. partner. Why, dollar for dollar, is international trade so much more important than domestic transactions? It is not, some critics suggest, and the government should stop wasting its effort. Just as California and Texas generally avoid trade disputes because no one knows the size of the imbalance, large savings in transpacific airfares, computer tape at the Bureau of the Census and headaches at the State Department and the Foreign Ministry could result if the numbers went uncollected. Those who make this suggestion contend that the only economic downside would be increased unemployment among the ranks of Washington's lobbyists and number crunchers.

Certainly, the way in which policymakers use external account statistics is an argument against their continued collection. As noted above, the presence of a trade imbalance between the United States and Japan says little about the openness of Japan's market. Hence, measures taken to open that market probably will not affect the imbalance. However, trade and current account numbers do cast a revealing spotlight on the extent of policymakers' failure to deal with the mismatch of domestic savings and domestic investment. While this mismatch may be beneficial if it leads to a capital inflow that enhances the competitive base of the recipient county, current account data do not provide a way of assessing how effectively the funds are used. If used for productivity-enhancing investment, the capital inflows could be beneficial, other factors equal. However, given the fact that the American and the Japanese imbalances of the 1980s

arose largely from the swelling of this country's federal budget deficit, which was not a consequence of productive investment, then international surpluses and deficits can be viewed as undesirable from the U.S. perspective. As such they point to an American -- not a Japanese -- policy failure. To that extent current account imbalances are useful to calculate, their misuse by policymakers notwithstanding.

External imbalances may not mean much in terms of trade policy, but the underlying export and import levels still are important, primarily because the levels might be less than would be possible in the absence of trade barriers. California's trade with Texas does not need to be calculated because there is no reason to believe that either state is taking measures to restrict purchases from the other. If trade is less than what it might be, then unexploited opportunities exist, not just for firms to make money but for buyers to obtain better or cheaper goods and services. Identifying such situations is an important role for economists, policymakers and lobbyists.

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The views expressed in this report are those of the author and do not necessarily represent those of the Japan Economic Institute.

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